

REMARKS

In response to the Office Action mailed January 9, 2008, Applicant respectfully requests reconsideration. Claims 1-22 were last presented for examination. Claims 3, 8-14, 16 and 18-22 were withdrawn from consideration. In the outstanding Office Action all claims were rejected. By the foregoing Amendments, claims 1-2, 4-7, 15 and 17 have been amended, claims 3, 8-14, 16 and 18-22 have been withdrawn, and no claims have been cancelled or added. Thus, upon entry of this paper, claims 1-2, 4-7, 15 and 17 will be pending in this application. Of these eight (8) claims, one (1) claim (claim 1) is independent.

Based on the above Amendments and following Remarks, Applicant respectfully requests that the outstanding objections and rejections be reconsidered, and that they be withdrawn.

Art of Record

Applicant acknowledges receipt of form PTO-892 listing additional references identified by the Examiner.

Applicant thanks the Examiner for returning form PTO-1449 filed by Applicant on January 14, 2005, which has been initialed by the Examiner indicating consideration of the references cited therein.

Foreign Priority

Applicant notes with appreciation the Examiner's acknowledgement of foreign priority under 35 U.S.C. §119.

Applicant notes with appreciation Examiner's acknowledgement of receipt of certified copies of the priority documents.

Drawings

Applicant respectfully requests that the Examiner acknowledge in the next the official action that the drawings have been accepted by the Examiner.

Election/Restrictions

Applicant thanks the Examiner for acknowledging Applicant's election of Group VI, claims 1-2, 4-7, 15 and 17, drawn to the species of Figures 11 and 12.

Claim Rejections under 35 U.S.C. § 112

Claims 1-2, 4-7, 15 and 17 have been rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Specifically, the Examiner asserts that the claim limitation of "a second one of said male and female members" is indefinite because it is unclear what is meant by "a second one." (*See*, Office Action, page 2.) Applicant thanks the Examiner for suggesting the use of "said" instead of "a second one." Applicant has amended claim 1 to remove "a second one."

Claims 2, 5 and 7 have also been rejected under §112 because these claims recite the limitation "it further comprises." Applicant thanks the Examiner for suggesting amendments to the preambles of claims 2, 5 and 7 to overcome these rejections. Applicant has amended claims 2, 5 and 7 as suggested by the Examiner.

Furthermore, claim 17 has been rejected under §112 because this claim recite the limitation "said male and female surfaces can degenerate into cylindrical surfaces." Applicant thanks the Examiner for suggesting amendments to claim 17 to overcome this rejection. Applicant has amended claim 17 as suggested by the Examiner.

In view of the above amendments to the claims, Applicant respectfully request that the Examiner reconsider and withdraw the rejections of claims 1-2, 4-7, 15 and 17 under 35 U.S.C. §112.

Rejections under 35 U.S.C. § 102(b)

Claims 1-2, 4, 15 and 17 have been rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 3,299,822 to Payne (hereinafter, "Payne"). For at least the following reasons, Applicant respectfully disagrees and respectfully asserts that Payne fails to teach all elements of claims 1-2, 4, 15 and 17.

Referring specifically to claim 1, the it is asserted in the Office Action that Payne discloses a rotary screw machine having male and female members in which “a first one of said male (10; 110; 500; 600; 700) member and said female (20; 120; 600; 700; 800) member is hinged in said body (30) and is able to rotate on itself about its fixed axis (Xm; Xf) according to a rotational motion” as recited in Applicant’s claim 1. (See, Office Action, page 5.) The Office Action directs Applicant to Figures 5 and 7, as well as columns 2 and 3 of Payne to support this assertion. (See, Office Action, page 5.)

Payne completely fails to teach a “member [that] is hinged in said body (30) and is able to rotate on itself about its fixed axis” as recited in claim 1. Payne is directed to a helical gear pump having inner and outer members each having helical threads. (See, Payne, col. 1, lns. 8-42.) The inner member is mounted within the outer member and is configured to be sealingly rotated with respect to the outer member. (See, Payne, col. 1, lns. 19-51.) “In operation, when the inner member is rotated relatively to the outer member a point on the axis of the inner member orbits in a circular path at fixed eccentricity.” (See, Payne, col. 1, lns. 43-51.) This eccentricity results from the cooperation of the surfaces of the inner and outer members. (See, Payne, col. 1, lns. 43-51.) The axis of rotation of the inner member is parallel to a longitudinal axis of the outer member. (See, Figures 6-7; col. 3, lns. 26-57.)

Due to the fixed arrangement of the inner member with respect to the outer member, Payne fails to teach a “member [that] is hinged in said body (30) and is able to rotate on itself about its fixed axis” as recited in claim 1. In fact, Payne is completely silent as to whether the inner or outer members of Payne are “hinged” in any manner whatsoever.

It was further asserted in the Office Action that Payne teaches a “rotary screw machine further having a main synchronizing coupling comprising a crank like mechanism (32; 34; 48; 59) generating an eccentricity E between said main axis X and one of the axes (Xm, Xf)” as recited in Applicant’s claim 1. As noted above, the helical gear pump of Payne has inner and outer members each having helical threads. (See, Payne, col. 1, lns. 8-42.) In the embodiment identified in the Office Action as support for a teaching of “a crank like mechanism”(figures 6, 7), “the outer member (11, 22) [of Payne] is fixed against rotation and the inner member or rotor (10, 20) is rotated by a suitable flexible drive such as a driving shaft provided with a universal joint or other flexible coupling or by a cardan shaft.” (See, Payne, col. 3, lines 15-91.) This

flexible drive or flexible coupling of Payne is not equivalent to “a crank like mechanism” as recited in claim 1. As would be appreciated by one of ordinary skill in the art, a crank is defined as “a bent part of an axle or shaft or an arm keyed at right angles to the end of a shaft by which circular motion is imparted to or received from it.” (*See*, Webster Dictionary 11th Edition, 2008). As such, the flexible drive of Payne cannot be considered equivalent to a “crank like mechanism” as recited in Applicant’s claim 1 above.

It was also asserted in the Office Action that this alleged “crank like mechanism” of Payne generates “eccentricity E between said main axis X and one of the axes (Xm, Xf)” of the male and female members, as recited in Applicant’s claim 1. Applicant disagrees.

As noted above, Payne suggests that “when the inner member is rotated relatively to the outer member a point on the axis of the inner member orbits in a circular path at fixed eccentricity” (*See*, Payne, col. 1, lns. 43-51.) This eccentricity is due to the cooperation of the surfaces of the inner and outer members and clearly not to the flexible drive of Payne. (*See*, Payne, col. 1, lns. 43-51.) The cooperation of the inner and outer members to generate an eccentricity is completely different from a “crank like mechanism (32; 34; 48; 59) generating an eccentricity” as recited in claim 1.

For at least the reasons discussed above, Payne fails to teach all elements of Applicant’s claim 1. Therefore, Applicant respectfully requests that the rejection of claim 1 under 35 U.S.C. §102(b) be reconsidered and that it be withdrawn.

Rejections under 35 U.S.C. § 103(a)

Claims 5-7 have also been rejected under 35 U.S.C. §103(a) as being obvious over Payne in view of Russian Patent No. 2 140 018 C1 to Brodov *et al.*, (hereinafter, “Brodov”). For at least the reasons discussed above with reference to the rejection of claim 1 under 35 U.S.C. §102, Applicant asserts that Payne fails to teach or suggest that which is asserted by the Examiner. Specifically, Payne fails to teach or suggest a “rotary screw machine further having a main synchronizing coupling comprising a crank like mechanism (32; 34; 48; 59) generating an eccentricity E between said main axis X and one of the axes (Xm, Xf), characterized in that a first one of said male... member and said female.. member is hinged in said body” as recited in claim 1, from which claims 5-7 depend. Furthermore, Brodov also fails to overcome the above discussed deficiencies of Payne. Therefore, because neither Payne nor Brodov teaches all

elements of claims 5-7, the rejections under 35 U.S.C. §103(a) is improper and should be withdrawn.

Dependent Claims

The dependent claims incorporate all the subject matter of their respective independent claims and add additional subject matter which makes them independently patentable over the art of record. Accordingly, the dependent claims are also allowable over the art of record.

Conclusion

In view of the foregoing, Applicant respectfully submits that this application is now in condition for allowance. A notice to this effect is respectfully requested. In the event the Examiner believes an interview might serve to advance the prosecution of this application in any way, the undersigned attorney is available at the telephone number noted below.

Please charge any fees due with this paper to our Deposit Account No. 22-0185, under Order No. 22193-00009-US1 from which the undersigned is authorized to draw.

Dated: April 9, 2008

Respectfully submitted,

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